SEW-EURODRIVE GmbH & Co KG
P.O. Box 3023
D-76642 Bruchsal/Germany
Phone +49 7251 75-0
Fax +49 7251 75-1970
sew@sew-eurodrive.com
➞ **www.sew-eurodrive.com**

Addendum to the Operating Instructions

MOVIMOT® MM..D

Retrofit Set for AC Motors DRS/DRE/DRP

Edition 02/2010

16742419 / EN

1 General Information

1.1 Structure of the safety notes

Pictogram	Signal word	Meaning	Consequences if disregarded
Example: General danger Specific danger, e.g. electric shock	**DANGER**	Imminent danger	Severe or fatal injuries
	WARNING	Possible dangerous situation	Severe or fatal injuries
	CAUTION	Possible dangerous situation	Minor injuries
	NOTICE	Possible damage to property	Damage to the drive system or its environment
	INFOR-MATION	Useful information or tip. Simplifies the handling of the drive system.	

1.2 Right to claim under limited warranty

A requirement of fault-free operation and fulfillment of any right to claim under limited warranty is that you adhere to the information in the MOVIMOT® documentation. Therefore, read the operating instructions before you start working with the unit.

Make sure that the operating instructions are available to persons responsible for the plant and its operation, as well as to person who work independently on the unit. You must also ensure that the documentation is legible.

1.3 Exclusion of liability

You must comply with the information contained in the MOVIMOT® documentation to ensure safe operation of MOVIMOT® and to achieve the specified product characteristics and performance requirements. SEW-EURODRIVE does not assume liability for injury to persons or damage to equipment or property resulting from non-observance of these operating instructions. In such cases, any liability for defects is excluded.

1.4 Other applicable documentation

- This additional information does not replace the detailed operating instructions.
- Only electrical specialists are allowed to perform installation and startup observing applicable accident prevention regulations and the "MOVIMOT® MM..D with AC Motors DRS/DRE/DRP" operating instructions.

1.5 Available retrofit sets

NOTICE

- Only (brake) motors are allowed to be retrofitted with:
  - Rated motor voltage AC 230/400 V, 50 Hz
  - Rated brake voltage AC 230 V for MM03 – MM15
    AC 120 V for MM22 – MM40
- No retrofit sets are available for UL units.
- MOVIMOT® retrofit sets are configured to order. This is the reason why retrofit sets do not have a part number.

1.5.1 Retrofit sets for DRS motors

1400 rpm ⅄

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
0.37	DRS71S4	MM03D, ⅄, DRS	DRS71S4/.../MM03D
0.55	DRS71M4	MM05D, ⅄, DRS	DRS71M4/.../MM05D
0.75	DRS80S4	MM07D, ⅄, DRS	DRS80S4/.../MM07D
1.1	DRS80M4	MM11D, ⅄, DRS	DRS80M4/.../MM11D
1.5	DRS90M4	MM15D, ⅄, DRS	DRS90M4/.../MM15D
2.2	DRS90L4	MM22D, ⅄, DRS	DRS90L4/.../MM22D
3.0	DRS100M4	MM30D, ⅄, DRS	DRS100M4/.../MM30D
4.0	DRS100LC4	MM40D, ⅄, DRS	DRS100LC4/.../MM40D

2900 rpm △

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
0.55	DRS71S4	MM05D, △, DRS	DRS71S4/.../MM05D
0.75	DRS71M4	MM07D, △, DRS	DRS71M4/.../MM07D
1.1	DRS80S4	MM11D, △, DRS	DRS80S4/.../MM11D
1.5	DRS80M4	MM15D, △, DRS	DRS80M4/.../MM15D
2.2	DRS90M4	MM22D, △, DRS	DRS90M4/.../MM22D
3.0	DRS90L4	MM30D, △, DRS	DRS90L4/.../MM30D
4.0	DRS100M4	MM40D, △, DRS	DRS100M4/.../MM40D

1.5.2 Retrofit sets for DRE motors

1400 rpm ⅄

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
0.75	DRE80M4	MM07D, ⅄, DRE	DRE80M4/.../MM07D
1.1	DRE90M4	MM11D, ⅄, DRE	DRE90M4/.../MM11D
1.5	DRE90L4	MM15D, ⅄, DRE	DRE90L4/.../MM15D
2.2	DRE100M4	MM22D, ⅄, DRE	DRE100M4/.../MM22D
3.0	DRE100LC4	MM30D, ⅄, DRE	DRE100LC4/.../MM30D
4.0	DRE132S4	MM40D, ⅄, DRE	DRE132S4/.../MM40D

2900 rpm △

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
1.1	DRE80M4	MM11D, △, DRE	DRE80M4/.../MM11D
1.5	DRE90M4	MM15D, △, DRE	DRE90M4/.../MM15D
2.2	DRE90L4	MM22D, △, DRE	DRE90L4/.../MM22D
3.0	DRE100M4	MM30D, △, DRE	DRE100M4/.../MM30D
4.0	DRE100LC4	MM40D, △, DRE	DRE100LC4/.../MM40D

1.5.3 Retrofit sets for DRP motors

1400 rpm ⅄

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
0.75	DRP90M4	MM07D, ⅄, DRP	DRP90M4/.../MM07D
1.1	DRP90L4	MM11D, ⅄, DRP	DRP90L4/.../MM11D
1.5	DRP100M4	MM15D, ⅄, DRP	DRP100M4/.../MM15D
2.2	DRP100L4	MM22D, ⅄, DRP	DRP100L4/.../MM22D
3.0	DRP112M4	MM30D, ⅄, DRP	DRP112M4/.../MM30D
4.0	DRP132M4	MM40D, ⅄, DRP	DRP132M4/.../MM40D

2900 rpm △

Power [kW]	Motor	+ MOVIMOT® retrofit set	= MOVIMOT® drive
1.1	DRP90M4	MM11D, △, DRP	DRP90M4/.../MM11D
1.5	DRP90L4	MM15D, △, DRP	DRP90L4/.../MM15D
2.2	DRP100M4	MM22D, △, DRP	DRP100M4/.../MM22D
3.0	DRP100L4	MM30D, △, DRP	DRP100L4/.../MM30D
4.0	DRP112M4	MM40D, △, DRP	DRP112M4/.../MM40D

1.5.4 Braking resistors for motors without brake

For motors without mechanical brake, we recommend to connect an integrated braking resistor BW.. . The braking resistor is not included in the scope of delivery of the retrofit set and must be ordered separately:

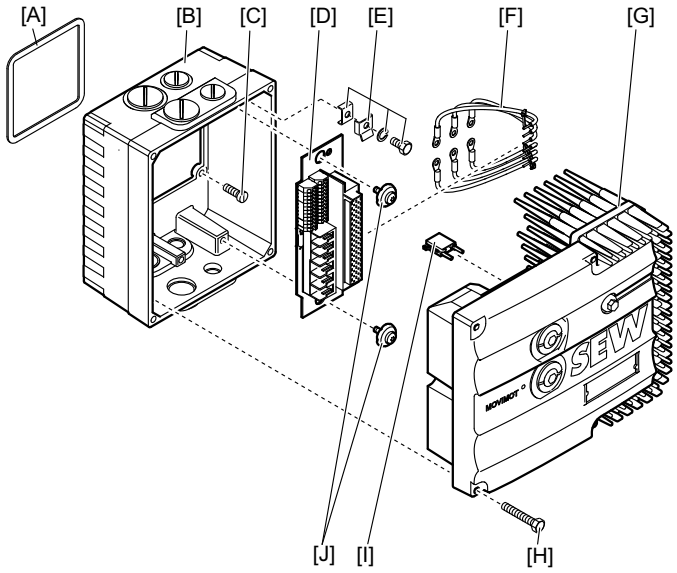
MOVIMOT® type	Braking resistor	Part number
MM03D to MM15D	BW1	0 822 897 3[1)]
MM22D to MM40D	BW2	0 823 136 2[1)]

1) The scope of delivery includes 2 screws M4 x 8.

2 Mechanical Installation

2.1 Scope of delivery of the retrofit set

Check the scope of delivery of the MOVIMOT® MM03D – MM40D retrofit set for completeness using the following figure.



783979147

[A]	Terminal box gasket	[E]	PE screw	[I]	Drive-ID module
[B]	Connection box	[F]	Connection cable	[J]	2 screws
[C]	4 screws	[G]	Cover with inverter		
[D]	Connection pcb	[H]	4 screws		

Parts [B] and [D] through [J] are already installed when the retrofit set is delivered.

2.2 Assembly

⚠ DANGER

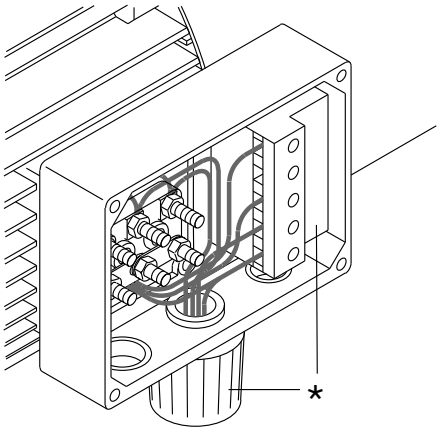
Disconnect the drive from the power supply before removing the terminal box cover.

Severe or fatal injuries from electric shock.

- Disconnect the drive drive from the supply system and secure it against unintentional reconnection to the voltage supply.
- Then wait at least for 1 minute.

1. Unscrew the terminal box cover and remove the power supply cable.

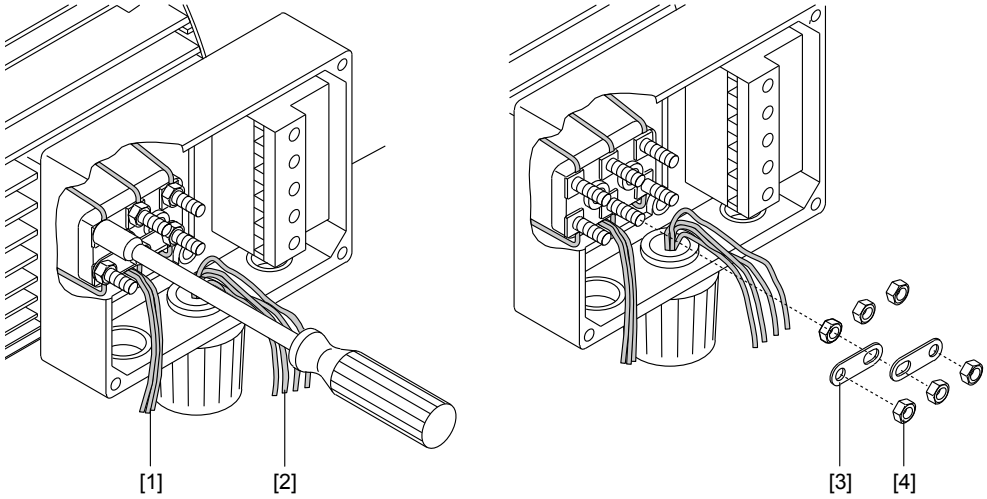
   Result as shown in the figure to the right:



* Brake control, optional

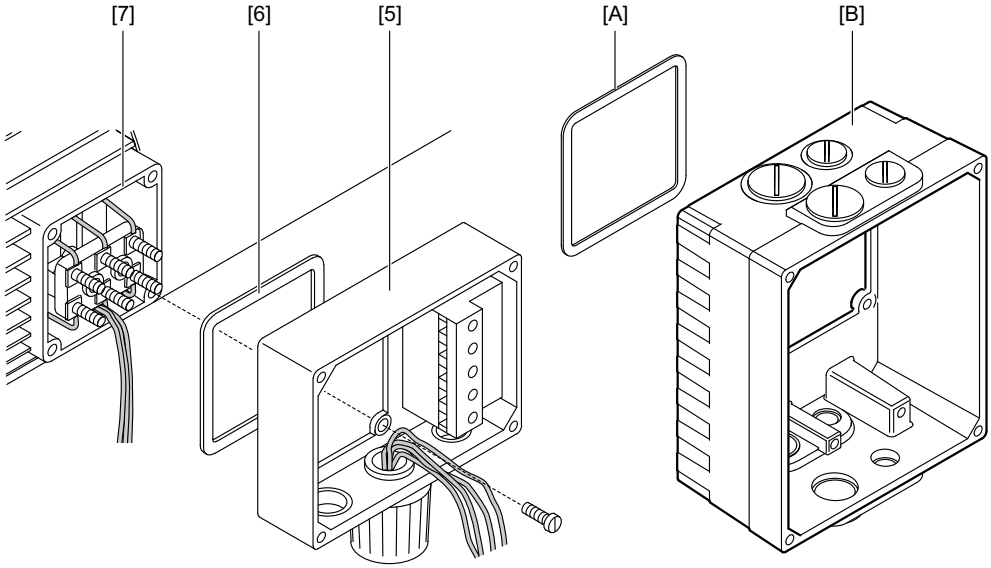
(only with brakemotors)

9007200042328587



9007200042336011

2. If present, disconnect the brake control cables [1] and [2].
3. Remove the nuts [4] and jumpers [3].



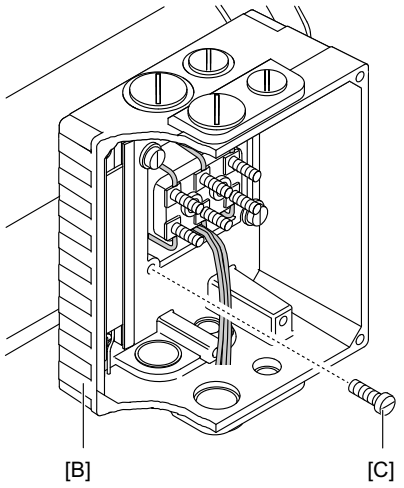
9007200042421003

4. Unscrew the lower part of the terminal box [5].
5. Remove the gasket [6].
6. Clean the sealing surface [7].
7. Place the <u>new</u> gasket [A] onto the terminal box [B].

8. Place the connection box [B] onto the motor and secure it using 4 screws [C].

   (Tightening torque 3.1 – 5.3 Nm / 29 – 47 lb.in)

   Check that the gasket is fitted correctly. The recess for the terminal board on the underside of the connection terminal must point toward the fan guard.

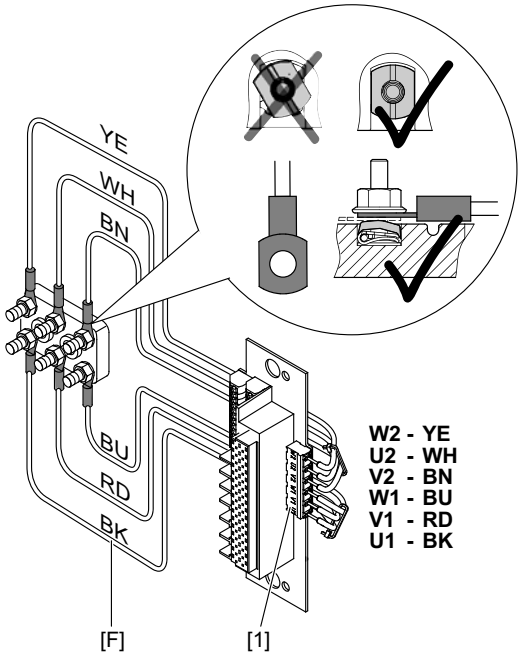


9007200042429195

9. Plug the connection cables [F] onto the bolts of the terminal board as shown in the wiring diagram. Tighten the connection cables using the previously unscrewed nuts.

   (Tightening torque 1.6 – 2.0 Nm / 14 – 18 lb.in)

10. Connect the connection cables [F] to the terminals [1] on the connection board according to the wiring diagram to the right.

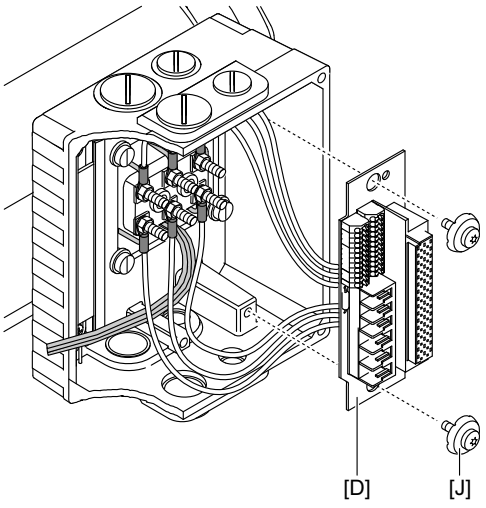


9007200043039883

11. Insert the connection board [D] into the terminal box and secure it using 2 screws [J].

    (Tightening torque 2.0 – 3.3 Nm / 18 – 29 lb.in)

    Be careful not to damage or squeeze the cables.



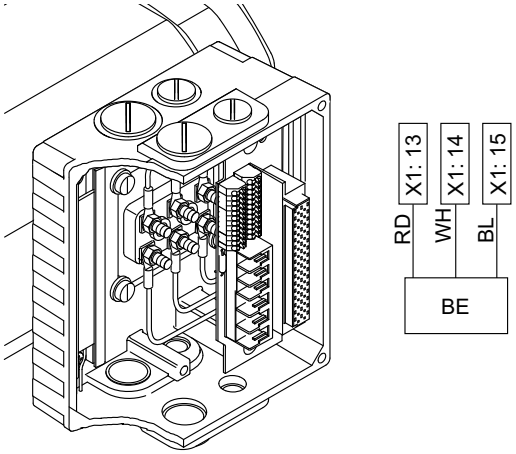
788423563

12. **Only for brakemotors:**

    Connect the connection cables of the BE.. brake as follows:

    - Red to terminal X1:13
    - White to terminal X1:14
    - Blue to terminal X1:15

    (Tightening torque of the terminals 0.8 – 1.1 Nm / 7– 10 lb.in)



9007200043226123

13. **Only for motors without a brake:**

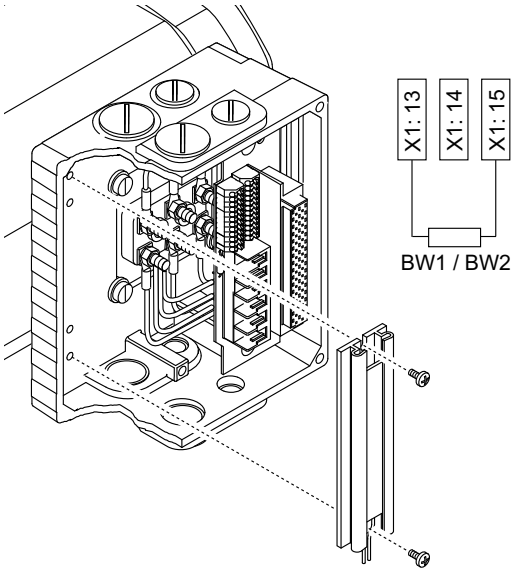
    Install the BW.. braking resistor in the terminal box using 2 screws.

    (Tightening torque 1.4 – 1.6 Nm / 12 – 14 lb.in)

    Connect the BW.. braking resistor to terminals X1:13 and X1:15.

    (Tightening torque of the terminals 0.8 – 1.1 Nm / 7 – 10 lb.in)

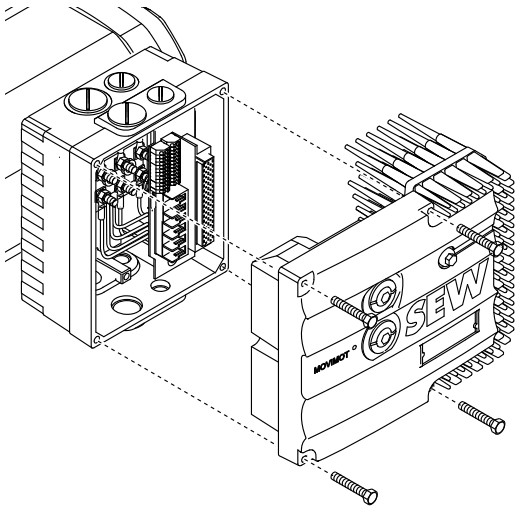
    Terminal X1:14 must not be assigned.



9007200043479691

14. Place the MOVIMOT® inverter onto the terminal box and secure it using 4 screws.

    (Tightening torque 3.0 Nm / 27 lb.in)



2602175499

After successful retrofitting, startup the MOVIMOT® drive according to the "MOVIMOT® MM..D with AC Motors DRS/DRE/DRP" operating instructions.